FIG. 1A

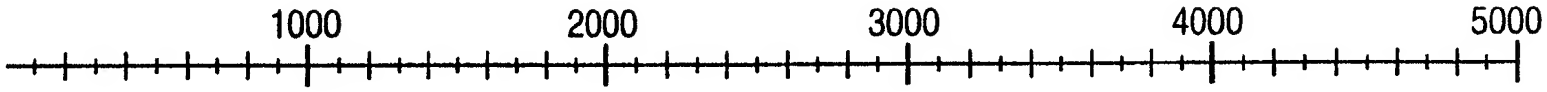
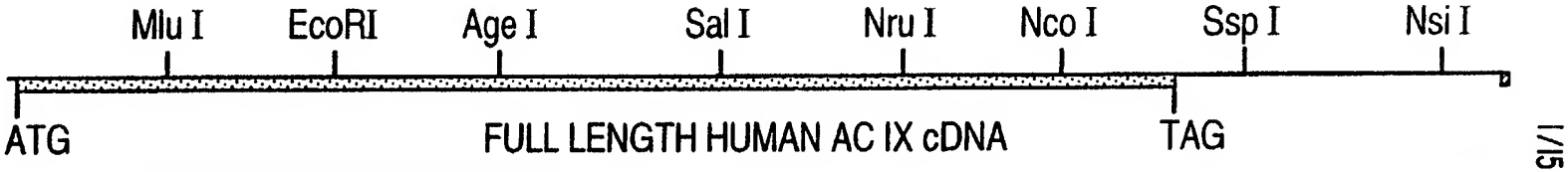


FIG. 1B



CLONE 52

FIG. 1C

CLONE 10

CLONE 5

FIG. 2A

```
CCCGGGACTC GACAACATGG CTTCCCCGCC CCACCAGCAG CTGCTGCATC      50
                M  A  S  P  P  H  Q  Q  L  L  H  H

ACCACAGCAC CGAGGTGAGC TGCGACTCCA GCGGGGACAG CAACAGCGTG     100
 H  S  T  E  V  S  C  D  S  S  G  D  S  N  S  V

CGCGTCAAGA TCAACCCCAA GCAGCTGTCC TCCAACAGCC ACCCCAAGCA     150
R  V  K  I  N  P  K  Q  L  S  S  N  S  H  P  K  H

CTGCAAATAC AGCATCTCCT CTAGCTGCAG CAGCTCTGGG GACTCCGGGG     200
 C  K  Y  S  I  S  S  S  C  S  S  S  G  D  S  G  G

GCGTCCCCCG GCGAGTGGGC GGCGGAGGCC GGCTGCGCAG GCAGAAGAAG     250
 V  P  R  R  V  G  G  G  G  R  L  R  R  Q  K  K

CTGCCCCAGC TGTTCGAGAG GGCCTCCAGC CGCTGGTGGG ACCCCAAGTT     300
L  P  Q  L  F  E  R  A  S  S  R  W  W  D  P  K  F

CGACTCGGTG AACCTGGAGG AGGCCTGCCT GGAGCGCTGC TTCCCGCAGA     350
 D  S  V  N  L  E  E  A  C  L  E  R  C  F  P  Q  T

CCCAGCGCCG GTTCCGGTAT GCGCTCTTCT ACATCGGCTT CGCCTGCCTT     400
 Q  R  R  F  R  Y  A  L  F  Y  I  G  F  A  C  L

CTGTGGAGCA TCTATTTTGC GGTCCACATG AGATCCAGAC TGATCGTCAT     450
L  W  S  I  Y  F  A  V  H  M  R  S  R  L  I  V  M

GGTCGCCCCC GCGCTGTGCT TCCTCCTGGT GTGTGTGGGC TTCTTTCTGT     500
 V  A  P  A  L  C  F  L  L  V  C  V  G  F  F  L  F

TTACCTTCAC CAAGCTGTAC GCCCGGCATT ACGCGTGGAC CTCGCTGGCT     550
 T  F  T  K  L  Y  A  R  H  Y  A  W  T  S  L  A

CTCACCCTGC TGGTGTTCGC CCTGACCCTG GCTGCGCAGT TCCAGGTCTT     600
L  T  L  L  V  F  A  L  T  L  A  A  Q  F  Q  V  L
```

FIG. 2B

```
GACGCCTGTC TCAGGACGCG GCGACAGCTC CAACCTTACG GCCACAGCCC      650
  T  P  V   S  G  R  G   D  S  S   N  L  T   A  T  A  R

GGCCCACAGA TACTTGCTTA TCTCAAGTGG GGAGCTTCTC CATGTGCATC      700
  P  T  D   T  C  L   S  Q  V  G   S  F  S   M  C  I

GAAGTGCTCT TTTTGCTCTA TACCGTCATG CACTTACCTT TGTACCTGAG      750
  E  V  L   F  L  L   Y  T  V  M   H  L  P   L  Y  L  S

TTTGTGTCTG GGGGTGGCCT ACTCTGTCCT TTTCGAGACC TTTGGCTACC      800
  L  C  L   G  V  A   Y  S  V  L   F  E  T   F  G  Y  H

ATTTCCGGGA TGAAGCCTGC TTCCCCTCGC CCGGAGCCGG GGCCCTGCAC      850
  F  R  D   E  A  C   F  P  S  P   G  A  G   A  L  H

TGGGAGCTGC TGAGCAGGGG GCTGCTCCAC GGCTGCATCC ACGCCATCGG      900
  W  E  L   L  S  R  G   L  L  H   G  C  I   H  A  I  G

GGTCCACCTG TTCGTCATGT CCCAGGTGAG GTCCAGGAGC ACCTTCCTCA      950
  V  H  L   F  V  M  S   Q  V  R   S  R  S   T  F  L  K

AGGTGGGGCA ATCCATTATG CACGGGAAGG ACCTGGAAGT GGAAAAAGCC     1000
  V  G  Q   S  I  M   H  G  K  D   L  E  V   E  K  A

CTCAAAGAGA GGATGATTCA TTCCGTGATG CCAAGAATCA TAGCCGATGA     1050
  L  K  E   R  M  I   H  S  V  M   P  R  I   I  A  D  D

CTTAATGAAG CAGGGAGATG AGGAGAGTGA GAATTCTGTC AAGAGGCATG     1100
  L  M  K   Q  G  D   E  E  S  E   N  S  V   K  R  H  A

CCACCTCGAG CCCCAAGAAC AGGAAGAAAA AGTCTTCCAT CCAAAAAGCT     1150
  T  S  S   P  K  N   R  K  K  K   S  S  I   Q  K  A

CCTATAGCCT TCCGCCCTTT TAAGATGCAG CAGATCGAAG AAGTCAGTAT     1200
  P  I  A   F  R  P   F  K  M  Q   Q  I  E   E  V  S  I
```

FIG. 2C

```
TTTATTTGCA GATATCGTGG GCTTCACCAA GATGAGTGCC AACAAGTCTG   1250
 L  F  A  D  I  V  G  F  T  K  M  S  A  N  K  S  A

CCCACGCCCT GGTGGGTCTC CTGAACGATC TGTTCGGTCG CTTCGACCGC   1300
 H  A  L  V  G  L  L  N  D  L  F  G  R  F  D  R

CTGTGTGAGG AGACCAAGTG TGAGAAAATC AGCACCCTGG GAGACTGTTA   1350
 L  C  E  E  T  K  C  E  K  I  S  T  L  G  D  C  Y

CTACTGCGTG GCGGGCTGTC CCGAGCCCCG GGCCGACCAT GCCTACTGCT   1400
 Y  C  V  A  G  C  P  E  P  R  A  D  H  A  Y  C  C

GCATCGAGAT GGGCCTGGGC ATGATCAAGG CCATCGAGCA GTTCTGCCAG   1450
 I  E  M  G  L  G  M  I  K  A  I  E  Q  F  C  Q

GAGAAGAAGG AGATGGTGAA CATGAGAGTC GGGGTGCACA CGGGCACCGT   1500
 E  K  K  E  M  V  N  M  R  V  G  V  H  T  G  T  V

CCTTTGCGGC ATCCTGGGCA TGAGGAGGTT TAAATTTGAC GTGTGGTCCA   1550
 L  C  G  I  L  G  M  R  R  F  K  F  D  V  W  S  N

ACGATGTGAA CCTGGCCAAT CTCATGGAGC AGCTGGGAGT GGCCGGCAAA   1600
 D  V  N  L  A  N  L  M  E  Q  L  G  V  A  G  K

GTTCACATTT CTGAGGCCAC CGCAAAATAC TTAGATGACC GGTACGAAAT   1650
 V  H  I  S  E  A  T  A  K  Y  L  D  D  R  Y  E  M

GGAAGATGGG AAAGTTATTG AACGGCTGGG CCAGAGCGTG GTTGCTGACC   1700
 E  D  G  K  V  I  E  R  L  G  Q  S  V  V  A  D  Q

AGTTGAAAGG TTTGAAGACA TACCTGATAT CGGGTCAGAG AGCCAAGGAG   1750
 L  K  G  L  K  T  Y  L  I  S  G  Q  R  A  K  E

TCTCGCTGCA GCTGTGCAGA GGCCTTGCTT TCTGGCTTTG AGGTCATTGA   1800
 S  R  C  S  C  A  E  A  L  L  S  G  F  E  V  I  D
```

FIG. 2D

```
CGGCTCACAG GTGTCCTCAG GCCCTAGGGG ACAGGGGACA GCGTCATCAG   1850
 G  S  Q   V  S  S  G   P  R  G   Q  G  T   A  S  S  G

GGAATGTCAG TGACTTGGCG CAGACTGTCA AAACCTTTGA TAACCTTAAG   1900
 N  V  S   D  L  A   Q  T  V  K   T  F  D   N  L  K

ACCTGCCCTT CGTGCGGAAT CACATTTGCT CCCAAATCTG AAGCCGGCGC   1950
 T  C  P   S  C  G   I  T  F  A   P  K  S   E  A  G  A

CGAGGGAGGA GCACCTCAAA ACGGCTGCCA AGACGAGCAT AAAAACAGCA   2000
 E  G  G   A  P  Q   N  G  C  Q   D  E  H   K  N  S  T

CCAAGGCTTC TGGAGGACCT AATCCCAAAA CTCAGAACGG GCTCCTCAGC   2050
 K  A  S   G  G  P   N  P  K  T   Q  N  G   L  L  S

CCTCCCCAAG AGGAGAAGCT CACCAACAGT CAGACTTCTC TGTGTGAGAT   2100
 P  P  Q   E  E  K   L  T  N  S   Q  T  S   L  C  E  I

CTTGCAGGAG AAGGGAAGGT GGGCAGGGGT GAGCCTGGAC CAGTCGGCTC   2150
 L  Q  E   K  G  R   W  A  G  V   S  L  D   Q  S  A  L

TCCTTCCGCT GAGGTTCAAG AACATCCGGG AGAAAACGGA CGCCCACTTT   2200
 L  P  L   R  F  K   N  I  R  E   K  T  D   A  H  F

GTGGACGTTA TCAAAGAAGA CAGCCTGATG AAAGATTACT TTTTTAAGCC   2250
 V  D  V   I  K  E   D  S  L  M   K  D  Y   F  F  K  P

GCCCATTAAT CAGTTCAGCC TGAACTTCCT GGATCAGGAG CTGGAGCGAT   2300
 P  I  N   Q  F  S   L  N  F  L   D  Q  E   L  E  R  S

CCTACAGGAC CAGCTATCAG GAAGAGGTCA TAAAGAACTC CCCCGTGAAG   2350
 Y  R  T   S  Y  Q   E  E  V  I   K  N  S   P  V  K

ACGTTTGCTA GTCCCACCTT CAGCTCCCTC CTGGATGTGT TTCTGTCGAC   2400
 T  F  A   S  P  T   F  S  S  L   L  D  V   F  L  S  T
```

FIG. 2E

```
CACAGTGTTT CTGACGCTGT CCACCACCTG CTTCCTGAAG TACGAGGCGG   2450
 T  V  F  L  T  L  S  T  T  C  F  L  K  Y  E  A  A

CCACCGTGCC TCCCCCGCCC GCCGCCCTGG CGGTCTTCAG TGCAGCCCTG   2500
 T  V  P  P  P  P  A  A  L  A  V  F  S  A  A  L

CTGCTGGAGG TGCTGTCCCT CGCGGTGTCC ATCAGGATGG TGTTCTTCCT   2550
 L  L  E  V  L  S  L  A  V  S  I  R  M  V  F  F  L

GGAGGACGTC ATGGCCTGCA CCAAGCGCCT GCTGGAGTGG ATCGCCGGCT   2600
 E  D  V  M  A  C  T  K  R  L  L  E  W  I  A  G  W

GGCTACCACG TCACTGCATC GGGGCCATCC TGGTGTCGCT TCCCGCACTG   2650
 L  P  R  H  C  I  G  A  I  L  V  S  L  P  A  L

GCCGTCTACT CCCATGTCAC CTCCGAATAT GAGACCAACA TACACTTCCC   2700
 A  V  Y  S  H  V  T  S  E  Y  E  T  N  I  H  F  P

AGTGTTCACA GGCTCGGCCG CACTGATTGC CGTCGTGCAC TACTGTAACT   2750
 V  F  T  G  S  A  A  L  I  A  V  V  H  Y  C  N  F

TCTGCCAGCT CAGCTCCTGG ATGAGGTCCT CCCTCGCCAC CGTCGTGGGG   2800
 C  Q  L  S  S  W  M  R  S  S  L  A  T  V  V  G

GCCGGGCCGC TGCTCCTGCT CTACGTCTCC CTGTGCCCAG ACAGTTCTGT   2850
 A  G  P  L  L  L  L  Y  V  S  L  C  P  D  S  S  V

ATTAACTTCG CCCCTTGACG CAGTACAGAA TTTCAGTTCC GAGAGGAACC   2900
 L  T  S  P  L  D  A  V  Q  N  F  S  S  E  R  N  P

CGTGCAATAG TTCGGTGCCG CGTGACCTCC GGCGGCCCGC CAGCCTCATC   2950
 C  N  S  S  V  P  R  D  L  R  R  P  A  S  L  I

GGCCAGGAGG TGGTTCTCGT CTTCTTTCTC CTGCTCTTGT TGGTCTGGTT   3000
 G  Q  E  V  V  L  V  F  F  L  L  L  L  L  V  W  F
```

FIG. 2F

```
CCTGAATCGC GAATTTGAAG TCAGCTACCG CCTCCACTAC CACGGAGACG   3050
 L  N  R   E  F  E  V   S  Y  R   L  H  Y   H  G  D  V

TGGAAGCGGA TCTTCACCGC ACCAAGATCC AGAGCATGCG GGACCAGGCA   3100
 E  A  D   L  H  R   T  K  I  Q   S  M  R   D  Q  A

GACTGGCTGC TGAGGAACAT CATCCCCTAC CACGTGGCTG AGCAGCTGAA   3150
 D  W  L   L  R  N   I  I  P  Y   H  V  A   E  Q  L  K

GGTGTCCCAG ACCTACTCCA AGAACCACGA CAGCGGAGGG GTGATCTTCG   3200
 V  S  Q   T  Y  S   K  N  H  D   S  G  G   V  I  F  A

CCAGCATCGT CAACTTCAGC GAGTTCTACG AGGAGAACTA CGAGGGCGGC   3250
 S  I  V   N  F  S   E  F  Y  E   E  N  Y   E  G  G

AAGGAGTGCT ACCGGGTCCT CAACGAGCTC ATCGGGGACT TTGACGAGCT   3300
 K  E  C   Y  R  V   L  N  E  L   I  G  D   F  D  E  L

CCTAAGCAAG CCGGACTACA GCAGCATCGA GAAGATCAAG ACCATCGGAG   3350
 L  S  K   P  D  Y   S  S  I  E   K  I  K   T  I  G  A

CCACGTACAT GGCGGCGTCA GGGCTGAACA CCGCGCAGGC CCAGGACGGC   3400
 T  Y  M   A  A  S   G  L  N  T   A  Q  A   Q  D  G

AGCCACCCGC AGGAGCACCT GCAGATCCTG TTCGAGTTCG CCAAGGAGAT   3450
 S  H  P   Q  E  H   L  Q  I  L   F  E  F   A  K  E  M

GATGCGCGTG GTGGACGACT TCAACAACAA CATGCTGTGG TTCAACTTCA   3500
 M  R  V   V  D  D   F  N  N  N   M  L  W   F  N  F  K

AGCTCCGCGT CGGCTTCAAC CATGGGCCCC TCACGGCCGG GGTCATCGGC   3550
 L  R  V   G  F  N   H  G  P  L   T  A  G   V  I  G

ACCACCAAGC TGCTGTACGA CATCTGGGGA GACACCGTCA ACATCGCCAG   3600
 T  T  K   L  L  Y   D  I  W  G   D  T  V   N  I  A  S
```

FIG. 2G

```
CAGGATGGAC ACCACCGGCG TGGAGTGCCG CATCCAGGTG AGCGAAGAGA   3650
 R  M  D   T  T  G  V   E  C  R   I  Q  V   S  E  E  S

GCTACCGCGT CTTGAGCAAG ATGGGCTATG ACTTCGACTA CAGAGGGACC   3700
  Y  R  V   L  S  K   M  G  Y  D   F  D  Y   R  G  T

GTGAATGTCA AGGGGAAAGG CCAGATGAAG ACCTACCTGT ACCCAAAGTG   3750
 V  N  V  K   G  K  G   Q  M  K   T  Y  L  Y   P  K  C

CACGGATCAC AGGGTCATCC CAGCACCAGC TGTCCATCTC CCCAGACATC   3800
 T  D  H   R  V  I  P   A  P  A   V  H  L   P  R  H  P

CGCGTCCAGG TGGATGGCAG CATCGGACGG TCTCCCACAG ACGAGATTGC   3850
  R  P  G   G  W  Q   H  R  T  V   S  H  R   R  D  C

CAACCTGGTG CCTTCTGTCC AGTATGTGGA CAAGACATCT CTGGGTTCTG   3900
 Q  P  G  A   F  C  P   V  C  G   Q  D  I  S   G  F

ACAGCAGCAC GCAGGCCAAG GATGCCCACC TGTCCCCCAA GAGACCGTGG   3950

AAGGAGCCCG TCAAAGCCGA AGAAAGGGGT CGATTTGGCA AAGCCATAGA   4000

GAAAGACGAC TGTGACGAAA CAGGAATAGA AGAAGCCAAC GAACTCACCA   4050

AGCTCAACGT TTCAAAGAGT GTGTGAGGCG GCGCCCACCC GCTGCCCGAG   4100

GTGCTCTGTT TGTCGAAACA CAGTAATATT TGTATTTGGC TGTTGTGCTT   4150

TCCAAGCGCC ACAGTTGCCC TCCCCGGACG TGGTGTTATG TGGTCATTTC   4200
```

FIG. 2H

AGCCCTAACT TCTGTGTGGA TCACAGTTAT TCAGGGTTCA TTTTCATCCA 4250

TTCTTCCCTT TCGCTCCCTT CCCTGGAAAC CCCGCTGCCT CTGGGTCATC 4300

CGTTCAGCAC GTGGTGGAGA ACAAGTGCCT TCAGGGCTGG CCTCGGCCTC 4350

GAGTCTCGGG ACAGAGGCCG CCAGTGGAGA TCATGGCTTT GGGTATTATT 4400

TGACTTTTAG AACAAAAGCT GTGGTTAAGA TCTCATTTTT ATTGCTTTTT 4450

CCCACGTCCC ACGAGACACT ATTTTCGGTT CTCTGGCTAA TACCCTGTTT 4500

TTGAGTTTAT TTTGTTTCTG TCTATGTCAC AGTGTCCCCC TACGACCCGA 4550

CCTCTCTATG TAAGCACACA TGCGCACACA CACTTGCATT CATGAATCTG 4600

ATATAAAGTG CCAGTAATCC GCCAAGAGGG GGTGCGAAGG GGGCATGTCA 4650

CGACAGCTCC GCCACCCCCC ATTGCCCACC CGCACTTTCC CGAGCACCGC 4700

GCCCCGTGGG CTGTGGGTGA GCCGCGCTCC CTGCACTGAG CGGGTTTAGG 4750

GGCTCGCCCA CATGCATGCA GGCCAAGACA GCAAATGCCA GCCGGGCACG 4800

FIG. 21

ACGCCTGTGT GCCCAGGCCT CGGGGGTCTC AGAGCCGCCT CTCACCCCCG 4850

ACCCTCCACC CAGGGGTCTC CCCGTCGGGA GTGGAGGCGT TGGTCCTGGA 4900

AGCTGACTCA TCGGAGAGGG AAATACCAAA TAAACATCCG AGGTTGCAAA 4950

AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAA 4985

FIG. 3D

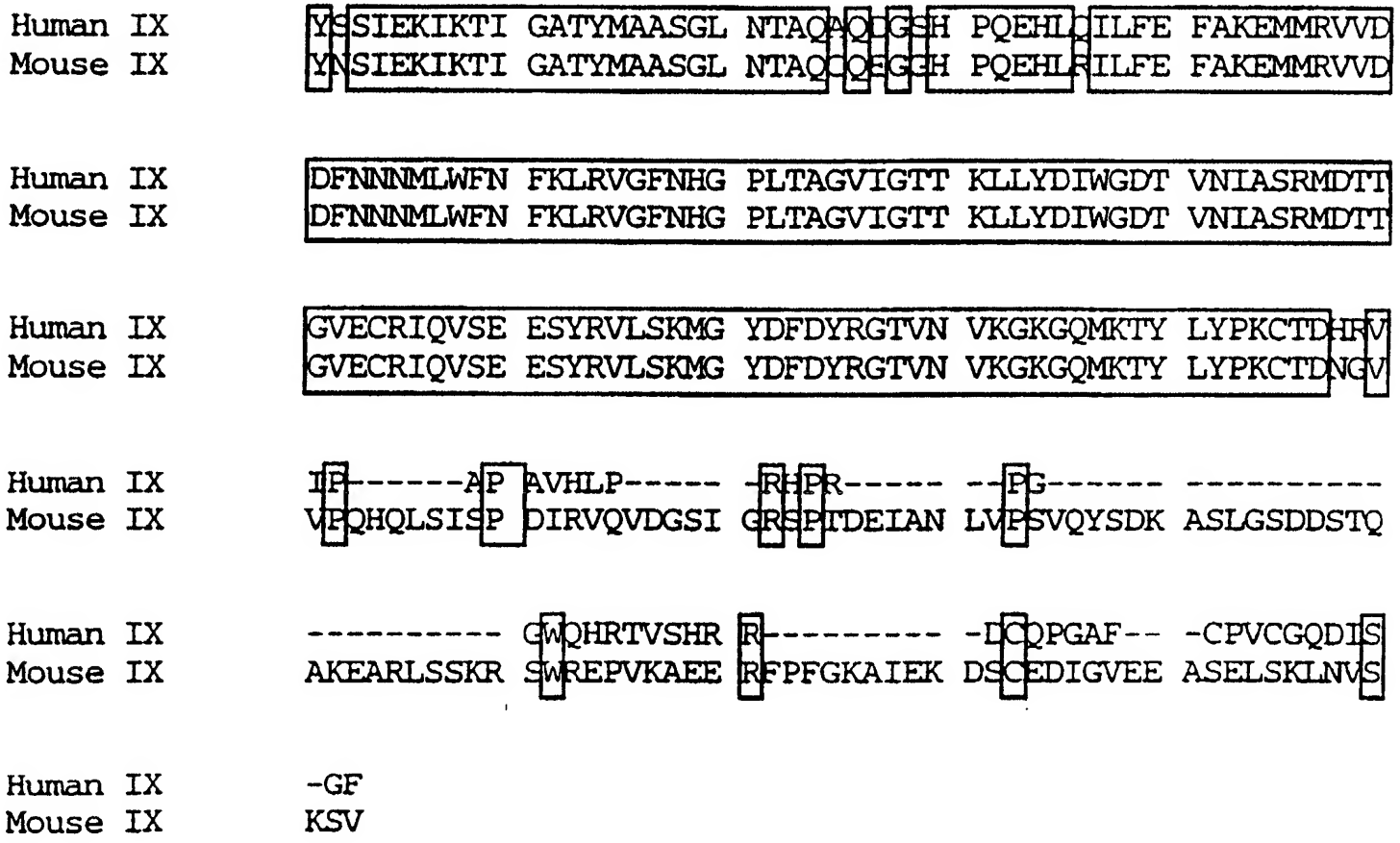


FIG. 3C

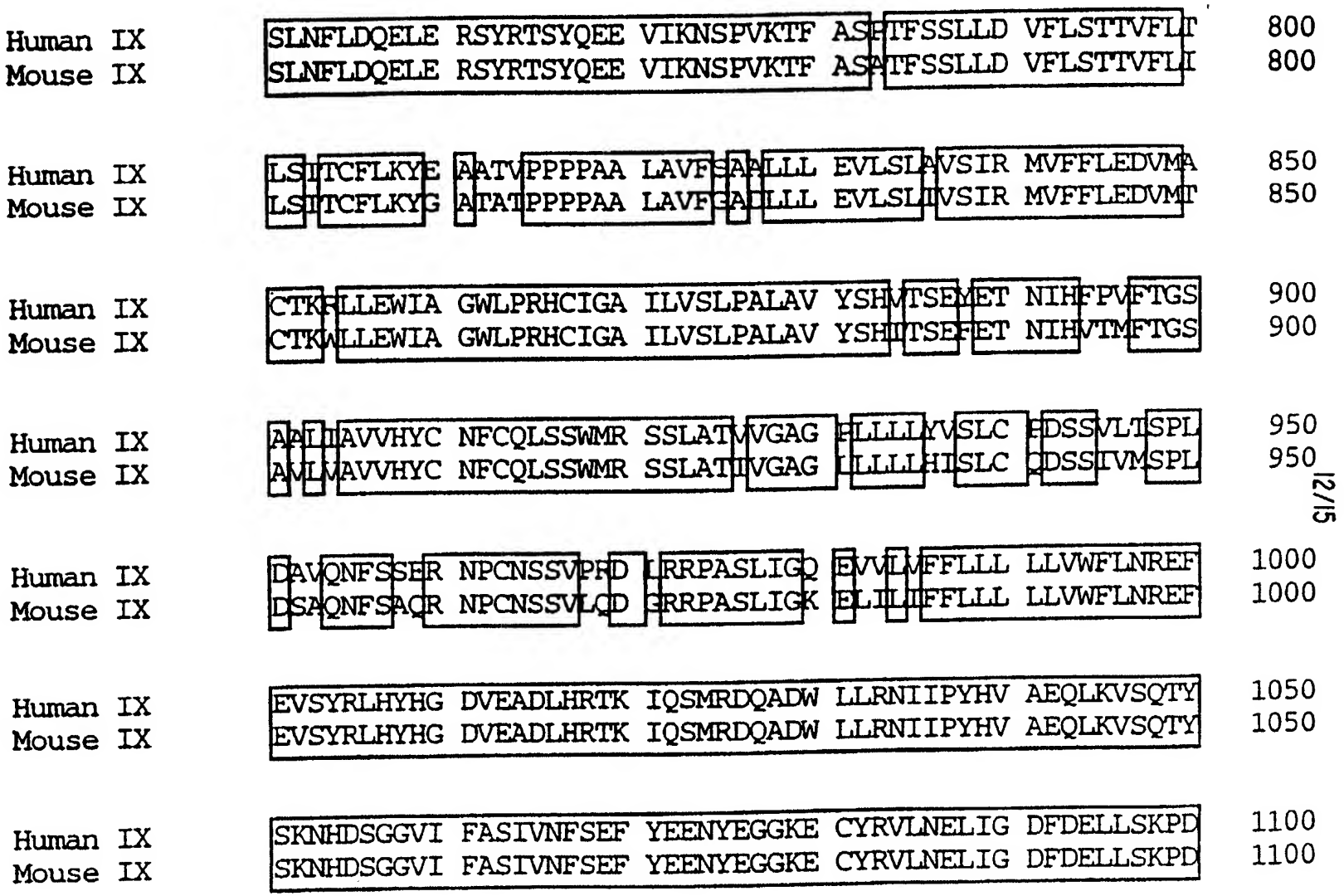

Human IX SLNFLDQELE RSYRTSYQEE VIKNSPVKTF ASPTFSSLLD VFLSTTVFLI 800
Mouse IX SLNFLDQELE RSYRTSYQEE VIKNSPVKTF ASPTFSSLLD VFLSTTVFLI 800
Human IX LSITCFLKYE AATVPPPPAA LAVFSAPLLL EVLSLAVSIR MVFFLEDVMA 850
Mouse IX LSITCFLKYG ATATPPPPAA LAVFSAPLLL EVLSLIVSIR MVFFLEDVMT 850
Human IX CTKFLLEWIA GWLPRHCIGA ILVSLPALAV YSHMTSEMET NIHFPVFTGS 900
Mouse IX CTKWLLEWIA GWLPRHCIGA ILVSLPALAV YSHITSEFET NIHVTMFTGS 900
Human IX APLIAVVHYC NFCQLSSWMR SSLATMVGAG LLLLLYVSLC QDSSVLTSPL 950
Mouse IX AMLVAVVHYC NFCQLSSWMR SSLATIVGAG LLLLLHISLC QDSSIVMSPL 950
Human IX DAVQNFSSER NPCNSSVPRD LRRPASLIGQ EVVLVFFLLL LLVWFLNREF 1000
Mouse IX DSAQNFSAQR NPCNSSVLQD GRRPASLIGK ELILIFFLLL LLVWFLNREF 1000
Human IX EVSYRLHYHG DVEADLHRTK IQSMRDQADW LLRNIIPYHV AEQLKVSQTY 1050
Mouse IX EVSYRLHYHG DVEADLHRTK IQSMRDQADW LLRNIIPYHV AEQLKVSQTY 1050
Human IX SKNHDSGGVI FASIVNFSEF YEENYEGGKE CYRVLNELIG DFDELLSKPD 1100
Mouse IX SKNHDSGGVI FASIVNFSEF YEENYEGGKE CYRVLNELIG DFDELLSKPD 1100

FIG. 3B

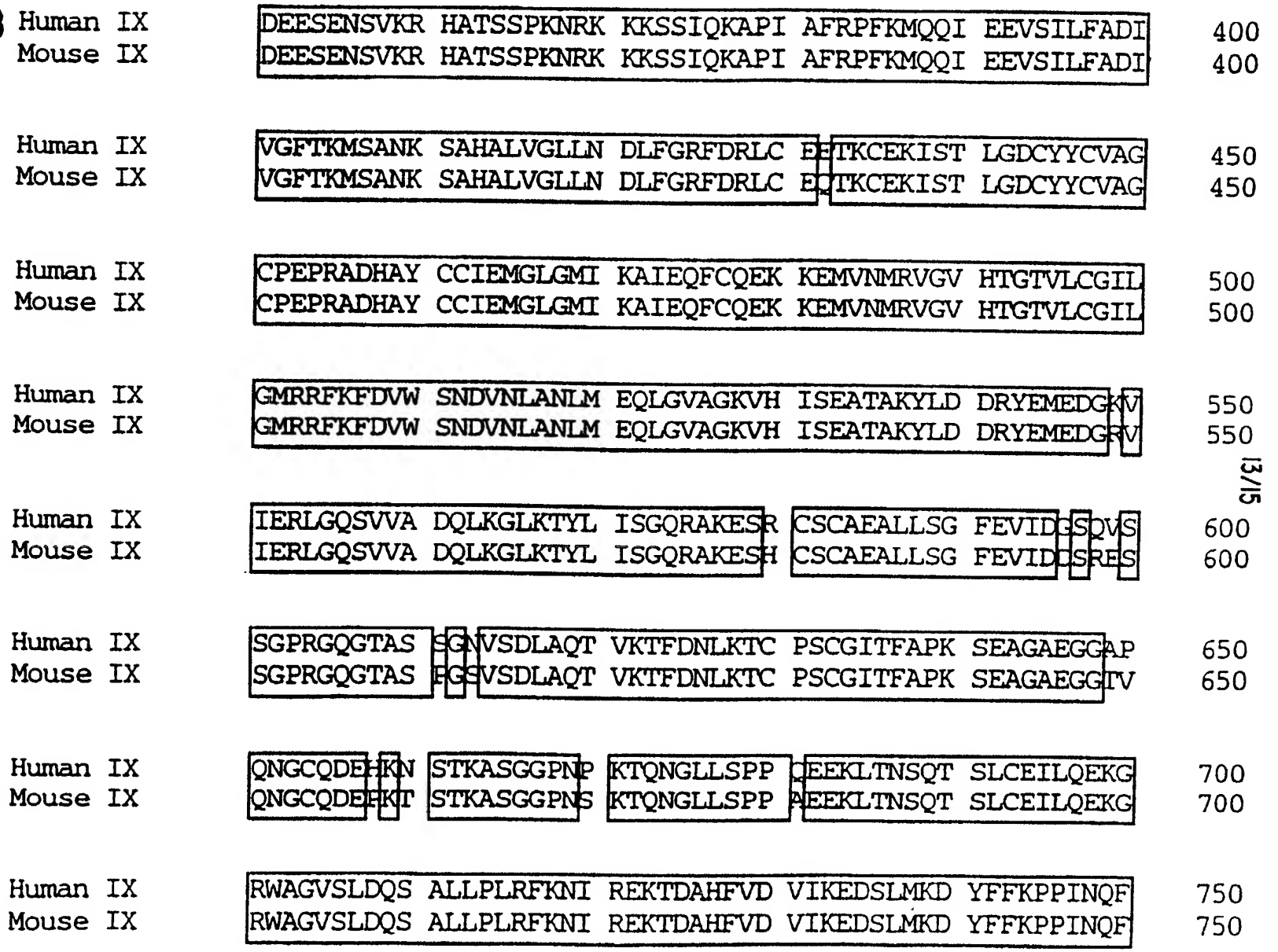
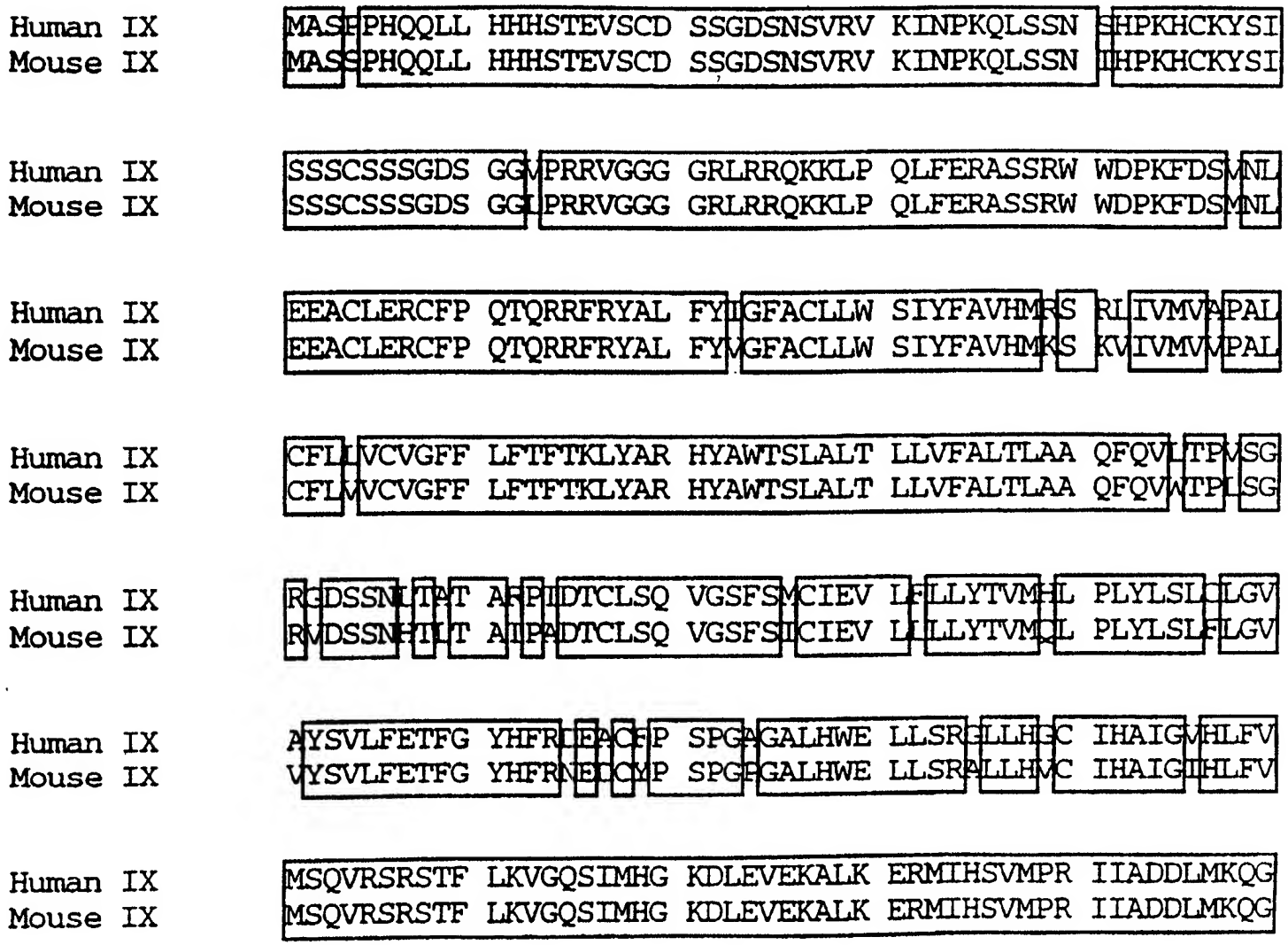


FIG. 3A



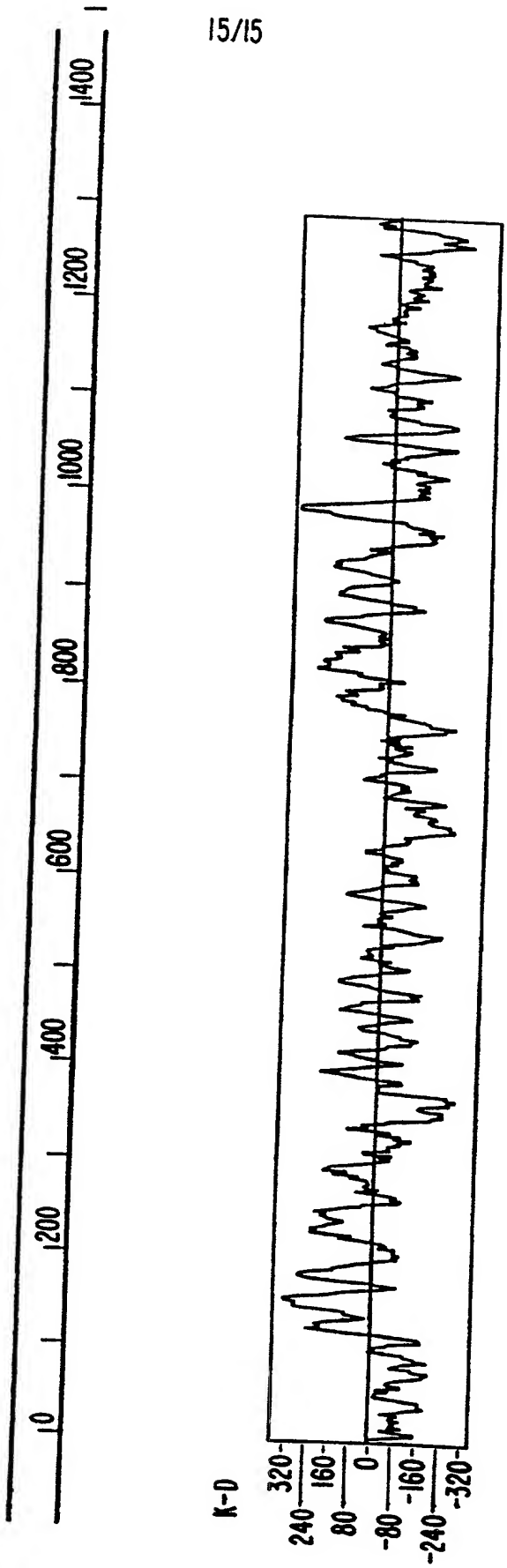

0
200
400
600
800
1000
1200
1400
K-D
320
160
0
-160
-320
240
80
-80
-240

FIG. 4